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Activation and transformation of white phosphorus by palladium(ii) complexes

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Abstract

A reaction of bis(triphenylphosphine)palladium dibromide with white phosphorus in the presence of NaBPh4 selectively gives phosphorous acid H3PO3. The mechanism of the formation involves coordination of a white phosphorus molecule, ligand exchange, and hydrolysis of the coordinated P4 molecule in the coordination sphere of palladium. © 2010 Springer Science+Business Media, Inc.

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Keywords

Palladium complexes, Phosphorous acid, White phosphorus